

1636

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                      |   |
|--|----------------------|---|
|  | Applicati n Numb r   | 10/085,418                              |
|  | Filing Date          | 02/28/2002                              |
|  | First Named Inventor | LOWE et al                              |
|  | Group Art Unit       | 1636                                    |
|  | Examiner Name        | TBA                                     |
| Total Number of Pages in This Submission <b>11</b> |                      | Attorney Docket Number <b>5022USCNT</b> |

**ENCLOSURES (check all that apply)**

|   |   |   |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment / Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| Remarks<br>150 reference documents; postcard receipt;<br>PTO Form 1449; International Search Report   |   |   |

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

|                         |   |
|-------------------------|---|
| Firm or Individual name | Michael E. Yates, Registration No. 36,063 |
| Signature               |   |
| Date                    | 01/13/2004                                |

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313 on this date: January 13, 2004

|                       |                 |      |            |
|-----------------------|-----------------|------|------------|
| Typed or printed name | Susan D. Holder |      |            |
| Signature             |                 | Date | 01/13/2004 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

LOWE et al

Appl. No. 10/085,418

Filed: February 28, 2002

For: GENE SILENCING

Art Unit: 1636

Examiner: TBA

Atty Docket: 50223USCNT

Confirmation No.: 8386

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure imposed by 37 C.F.R. § 1.56 to inform the Patent and Trademark Office of all references coming to the attention of each individual associated with the filing or prosecution of the subject application, which are or may be material to the patentability of any claim of the application, Attorneys for Applicants hereby direct the Examiner's attention the attached Forms PTO-1449. Photocopies of these references are enclosed.

Identification of the listed references is not to be construed an admission of Applicants or Attorneys for Applicants that such references are available as "prior art" against the subject application.

Applicants respectfully request that the Examiner review the foregoing references and that the references be made of record in the file history of the application.

Also submitted herewith, is a copy of the International Search Report.

Applicants respectfully point out to the Examiner that the corresponding application has been allowed in Australia, and is currently being opposed. A copy of the patent as allowed (AU 747872) is included as reference AL. The copies of the Notices of Opposition are included as references EJ and EK, and the Statements of Grounds and Particulars are references FT and FU filed on behalf of Benitec Australia Ltd. and CSIRO, respectively. The references cited in the Statements of Grounds and Particulars are listed on the present 1449.

The corresponding European patent application has also been recently allowed and a copy of the allowed application (EP 0983370B1) is provided as reference AO. To date, no oppositions have been filed. We will inform the Examiner in the future if any oppositions are filed.

Also, the 1449 includes references FR and FS that are electronic mail messages about efforts to duplicate the method.

In accordance with 37 CFR §1.97(b)(3), no fee is believed to be required for consideration of this statement because it is being submitted before the mailing date of a first Office Action on the merits. If a fee is deemed to be required, the Commissioner is hereby authorized to charge such fee to Deposit Account No. 50-1744 of Syngenta Biotechnology Inc.

Respectfully submitted,



Mary Kakefuda  
Attorney for Applicant  
Registration No. 39,245  
Telephone: 919-765-5071

Syngenta Biotechnology, Inc.  
P. O. Box 12257  
Research Triangle Park, NC 27709-2257  
Date: January 9, 2004

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636**INFORMATION DISCLOSURE CITATION**

(Use several sheets if necessary)

**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT NUMBER | DATE       | NAME                 | CLASS     | SUBCLASS    | FILING DATE |
|---------------------|----|-----------------|------------|----------------------|-----------|-------------|-------------|
|                     | AA | 5,034,323       | 7/23/1991  | Jorgansen and Napoli | 435/172.3 | 800/205     | 3/30/1989   |
|                     | AB | 5,190,931       | 3/2/1993   | Masayori, Inouye     | 435/91    | 435/240.2   | 3/2/1993    |
|                     | AC | 5,231,020       | 7/27/1993  | Jorgensen and Napoli | 435/172.3 | 435/320.1   | 3/29/1990   |
|                     | AD | 5,283,184       | 2/1/1994   | Jorgensen and Napoli | 435/172.3 | 800/205     | 4/17/1991   |
|                     | AE | 5,365,015       | 11/15/1994 | Grierson et al       | 800/205   | 435/172.3   | 7/12/1990   |
|                     | AF | 5,530,192       | 6/25/1996  | Murase et al         | 800/205   | 800/DIG. 69 | 1/28/1997   |
|                     | AG | 5,597,718       | 1/28/1997  | John et al           | 800/263   | 435/69.1    | 9/20/1995   |
|                     | AH | 5,850,026       | 12/15/1998 | DeBonte and Hitz     | 800/281   | 800/278     | 7/3/1996    |
|                     | AI | 5,939,600       | 8/17/1999  | Goldbach et al       | 800/205   | 435/69.1    | 9/16/1996   |
|                     | AJ | 5,952,546       | 9/14/1999  | Bedbrook et al       | 800/298   | 435/320.1   | 6/27/1996   |
|                     | AK | 6,150,585       | 11/21/2000 | Goldbach et al       | 800/205   | 800/250     | 11/26/1996  |

**FOREIGN PATENT DOCUMENTS**

|  |    | DOCUMENT<br>NUMBER | DATE       | OFFICE | CLASS      | SUBCLASS    | TRANSLATION<br>YES NO    |                          |
|--|----|--------------------|------------|--------|------------|-------------|--------------------------|--------------------------|
|  | AL | AU 747872          | 12/11/1998 | AU     | C12 15/63  | C12 15/82   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AM | AU 20891/97        | 10/1/1997  | AU     | C12N 15/53 | C12N 15/82  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AN | EP 0467349         | 1/22/1992  | EP     | C12N 1/21  | C12N 15/63  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AO | EP 0983 370        | 9/17/2003  | EP     | C12N 15/63 | C12N 15/82  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AP | EP 223399          | 5/27/1987  | EP     | C12N 15/00 |             | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AQ | EP 240208          | 10/7/1997  | EP     | C12N 15/00 | A01H 1/00   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AR | EP 426195          | 5/8/1991   | EP     | C12N 15/40 | C12N 15/82  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AS | EP 458367          | 11/27/1991 | EP     | C12N 15/82 | C12N 15/74  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AT | EP 522880          | 1/13/1993  | EP     | C12N 15/55 | C12N 15/82  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AU | EP 647715          | 4/12/1995  | EP     | C12N 15/82 | A01H 5/00   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AV | EP 779364          | 6/18/1997  | EP     | C12N 15/82 | C12N 15/29  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AW | WO 00/01846        | 1/13/2000  | WIPO   | C12Q 1/68  |             | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AX | WO 89/10396        | 11/2/1989  | WIPO   | C12N 5/00  | C12N 15/00  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AY | WO 90/14090        | 11/29/1990 | WIPO   | A61K 31/70 | C07H 19/067 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | AZ | WO 91/02069        | 2/21/1991  | WIPO   | C12N 15/82 | C12N 5/10   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BA | WO 91/16440        | 10/31/1991 | WIPO   | C12N 15/82 | C12N 15/56  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BB | WO 92/04456        | 3/19/1992  | WIPO   | C12P 1/00  | C12N 5/04   | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BC | WO 92/11375        | 9/9/1992   | WIPO   | C12N 15/56 | C12N 9/44   | <input type="checkbox"/> | <input type="checkbox"/> |

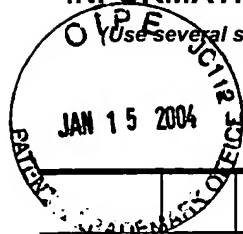
**EXAMINER****DATE CONSIDERED**

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)



|  |    | DOCUMENT<br>NUMBER | DATE       | OFFICE | CLASS      | SUBCLASS   | TRANSLATION              |                          |
|--|----|--------------------|------------|--------|------------|------------|--------------------------|--------------------------|
|  |    |                    |            |        |            |            | YES                      | NO                       |
|  | BD | WO 92/11376        | 9/9/1992   | WIPO   | C12N 15/56 | C12N 9/42  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BE | WO 92/13070        | 8/6/1992   | WIPO   | C12N 15/00 | C12N 15/10 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BF | WO 92/17596        | 10/15/1992 | WIPO   | C12N 15/82 | C12N 15/29 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BG | WO 92/18625        | 10/29/1992 | WIPO   | C12N 15/11 | C12N 15/29 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BH | WO 92/21757        | 12/10/1992 | WIPO   | A01H 5/00  | A01N 65/00 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BI | WO 93/05159        | 3/18/1993  | WIPO   | A01H 5/00  | C12N 15/53 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BJ | WO 93/10251        | 5/27/1993  | WIPO   | A01H 5/00  | C12N 15/82 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BK | WO 93/23551        | 11/25/1993 | WIPO   | C12N 15/82 | C12N 15/11 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BL | WO 94/01550        | 1/20/1994  | WIPO   | C12N 15/11 | C07H 21/00 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BM | WO 94/09143        | 4/29/1994  | WIPO   | C12N 15/82 | C12N 15/11 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BN | WO 94/17176        | 8/4/1994   | WIPO   | C12N 5/00  | C12N 15/00 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BO | WO 94/17194        | 8/4/1994   | WIPO   | C12N 15/82 | A01H 5/00  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BP | WO 94/18337        | 8/18/1994  | WIPO   | C12N 15/82 | C12N 15/53 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BQ | WO 94/29465        | 12/22/1994 | WIPO   | C12N 15/82 | C12N 15/11 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BR | WO 95/07993        | 3/23/1995  | WIPO   | C12N 15/82 | C12N 15/29 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BS | WO 95/09920        | 4/13/1995  | WIPO   | C12N 15/33 | C12N 15/11 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BT | WO 97/01952        | 1/23/1997  | WIPO   | A01H 1/04  | A01H 4/00  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BU | WO 97/13865        | 4/17/1997  | WIPO   | C12N 15/82 | C12N 15/56 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BV | WO 97/16559        | 5/9/1997   | WIPO   | C12N 15/82 | C12N 15/54 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BW | WO 98/05770        | 2/12/1998  | WIPO   | C12N 15/11 | C12N 15/55 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BX | WO 98/53083        | 11/26/1998 | WIPO   | C12N 15/63 | C12N 15/82 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BY | WO 99/15682        | 4/1/1999   | WIPO   | C12N 15/82 | A01H 3/00  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | BZ | WO 99/32619        | 7/1/1999   | WIPO   | C12N 15/11 | C12N 15/63 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | CA | WO 99/49029        | 9/30/1999  | WIPO   | C12N 15/11 |            | <input type="checkbox"/> | <input type="checkbox"/> |
|  | CB | WO 99/53050        | 10/21/1999 | WIPO   | C12N 15/11 | A01H 3/00  | <input type="checkbox"/> | <input type="checkbox"/> |
|  | CC | WO 99/61631        | 12/2/1999  | WIPO   | C12N 15/63 | C12N 15/82 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | CD | WO 99/61632        | 12/2/1999  | WIPO   | C12N 15/63 | C12N 15/67 | <input type="checkbox"/> | <input type="checkbox"/> |
|  | CE | WO94/17176         | 4/8/1994   | WIPO   | C12N 5/00  | C12N 15/00 | <input type="checkbox"/> | <input type="checkbox"/> |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent pages, Etc.)

|    |  |
|----|--|
| CF | Assad et al, <i>Epigenetic repeat-induced gene silencing (RIGS) in Arabidopsis</i><br><i>Plant Molecular Biology</i> , Vol. 22, No. 6 (1993) pp. 1067-1085   |
| CH | Barry et al., Methylation induced premeiotically in <i>Ascomolus</i> : coextension with DNA repeat lengths and effect on transcript elongation.<br><i>Proceedings of the National Academy of Sciences, USA</i> Vol. 90: (1993) pp.4557-4561. |

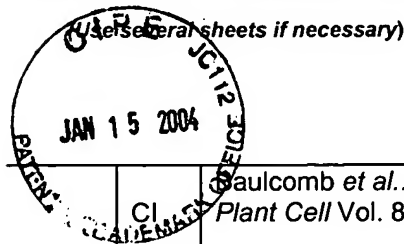
EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

ATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636

Use separate sheets if necessary

|  |    |  |
|--|----|--|
|  | CI | Gaulcomb et al., Mechanisms of pathogen-derived resistance to viruses in transgenic plants.<br><i>Plant Cell</i> Vol. 8: (1996) pp. 1833-1844.   |
|  | CJ | Bevec et al, <i>Constitutive Expression of Chimeric Neo-Rev Response Element Transcripts Suppresses HIV-1 Replication in Human CD4<sup>+</sup> T Lymphocytes</i><br><i>Human Gene Therapy</i> , Vol. 5 (1994), p. 193-201  |
|  | CK | Blomberg et al, <i>Control of replication of plasmid R1: the duplex between the antisense RNA, CopA, and its target, CopT, is processed specifically in vivo and in vitro by RNase III</i><br><i>The European Molecular Biology Organization</i> , Vol. 9, No. 7, (1990) pp. 2331-2340 |
|  | CL | Blume et al, <i>Identification of transposon-like elements in non-coding regions of tomato ACC oxidase genes</i><br><i>Molecular and General Genetics</i> , Vol. 254 (3) (April 16, 1997), pp. 297-303   |
|  | CM | Brantl, S. and Behnke, D., <i>Copy number control of the streptococcal plasmid pIP501 occurs at three levels</i><br><i>Nucleic Acids Research</i> , Vol. 20, No. 3 (1992) pp. 395-400  |
|  | CN | Braun and Hemenway, <i>Expression of amino-terminal portions or full-length viral replicase genes in transgenic plants confers resistance to potato virus X infection</i><br><i>Plant Cell</i> Vol. 4 (1992) pp. 735-744.  |
|  | CO | Brederode et al, <i>Replicase-mediated resistance to alfalfa mosaic virus</i><br><i>Virology</i> Vol. 207 (1995) pp. 467-474.  |
|  | CP | Cameron, F. and Jennings, P., <i>Specific gene suppression by engineered ribozymes in monkey cells</i><br><i>Proceedings of the National Academy of Sciences, USA</i> , Vol. 86 (December 1989), pp. 9139-9143   |
|  | CQ | Cameron, F.H. and Jennings, P.A., <i>Inhibition of gene expression by a short sense fragment</i><br><i>Nucleic Acids Research</i> , Vol. 19, No. 3 (1991), pp. 469-475   |
|  | CR | Carr et al <i>Resistance to tobacco mosaic virus induced by the 54-kDa gene sequence requires expression of the 54-kDa protein</i><br><i>Molecular Plant-microbe interactions</i> Vol. 5 (1992) pp. 397-404.   |
|  | CS | Chuah et al, <i>Inhibition of Human Immunodeficiency Virus Type-1 by Retroviral Vectors Expressing Antisense-TAR</i><br><i>Human Gene Therapy</i> , Vol. 5 (December 1994), pp. 1467-1475  |
|  | CT | Citron, M. and Schuster, H., <i>The c4 Repressors of Bacteriophages P1 and P7 Are Antisense RNAs</i><br><i>Cell</i> , Vol. 62 (August 10, 1990), pp. 591-598   |
|  | CU | Dale et al. <i>Intra- and intermolecular site-specific recombination in plant cells mediated by bacteriophage P1 recombinase</i><br><i>Gene</i> Vol. 91: (1990) pp. 79-85  |
|  | CV | de Carvalho Niebel et al. <i>Post-transcriptional cosuppression of 1,3-glucanase genes does not affect accumulation of transgene nuclear mRNA</i><br><i>Plant Cell</i> Vol. 7: (1995) pp. 347-358  |
|  | CW | Denoya et al, <i>Translational Autoregulation of ermC 23S rRNA Methyltransferase Expression in Bacillus subtilis</i><br><i>Journal of Bacteriology</i> , Vol. 168, No. 3 (December 1986), pp. 1133-1141  |
|  | CX | Dorer et al, <i>Transgene repeat arrays interact with distant heterochromatin and cause silencing in cis and trans.</i><br><i>Genetics</i> 147: (1997) pp. 1181-1190.  |

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

|  |    |   |
|--|----|---|
|  |    | Dorer, D.R. and Henikoff, S., <i>Expansions of Transgene Repeats Cause Heterochromatin Formation and Gene Silencing in Drosophila</i><br><i>Cell</i> , Vol. 77 (July 1, 1994), pp. 993-1002   |
|  | CZ | English et al, <i>Suppression of virus accumulation in transgenic plants exhibiting silencing of nuclear genes</i><br><i>Plant Cell</i> Vol. 8: (1996) pp. 179-188  |
|  | DA | Fire et al, <i>Production of antisense RNA leads to effective and specific inhibition of gene expression in C. elegans muscle</i><br><i>Development</i> , Vol. 113 (1991), pp. 503-514  |
|  | DB | Fire et al, <i>Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans</i><br><i>Nature</i> Vol. 391: (1998) pp. 806-811  |
|  | DC | Gervais et al, <i>Multigene Antiviral Vectors Inhibit Diverse Human Immunodeficiency Virus Type 1 Clades</i><br><i>Journal of Virology</i> , Vol. 71, No. 4 (April 1997), pp. 3048-3053   |
|  | DD | Goodwin et al <i>Genetic and biochemical dissection of transgenic RNA-mediated virus resistance</i><br><i>Plant Cell</i> 8: (1996) 95-105.  |
|  | DE | Grierson, D, <i>Silent genes and everlasting fruits and vegetables</i><br><i>Nature Biotechnology</i> , Vol. 14(7) (1996) pp. 828-829   |
|  | DF | Hama et al, <i>Organization of the Replication Control Region of Plasmid Collb-P9</i><br><i>Journal of Bacteriology</i> , Vol. 172, No. 4 (April 1990), pp. 1983-1991   |
|  | DG | Hamilton et al, <i>Antisense gene that inhibits synthesis of the hormone ethylene in transgenic plants</i><br><i>Nature</i> , Vol. 346 (July 19, 1990), pp. 284-287   |
|  | DH | Hamilton et al, "Post-transcriptional gene-silencing in tomato<br>Mechanisms and Applications of Gene Silencing," 57 <sup>th</sup> Easter School Meeting date 1995, pps. 105-117; Ed: Grierson et al (Nottingham University Press, Nottingham, UK 1996) |
|  | DI | Hamilton, et al, <i>A transgene with repeated DNA causes high frequency, post-transcriptional suppression of ACC-oxidase gene expression in tomato</i><br><i>The Plant Journal</i> , Vol. 15 (6) (1998), pp. 737-746                                    |
|  | DJ | Hobbs et al <i>The effect of T-DNA copy number, position and methylation on reporter gene expression in tobacco transformants</i><br><i>Plant Molecular Biology</i> Vol. 15: (1990) pp. 851-864   |
|  | DK | Ingelbrecht et al, <i>Posttranscriptional silencing of reporter transgenes in tobacco corrects with DNA methylation</i><br><i>Proceedings of the National Academy of Sciences, USA</i> Vol. 91: (October, 1994) pp. 10502-10506                         |
|  | DL | Jorgensen et al, <i>Do unintended antisense transcripts contribute to sense co-suppression in plants?</i><br><i>Trends in Genetics</i> Vol. 15, No. 1 (January, 1999) pp. 11-12   |
|  | DM | Kawcheck et al <i>Sense and antisense RNA-mediated resistance to potato leafroll virus in russet burbank potato plants</i><br><i>Molecular Plant-microbe Interactions</i> Vol. 4, No. 3, (1991) pp. 247-253   |

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

ATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636

|    |   |
|----|---|
| DN | Kubo, M. and Imanaka, T., <i>mRNA Secondary Structure in an Open Reading Frame Reduces Translation Efficiency in Bacillus subtilus subtilis</i><br><i>Journal of Bacteriology</i> , Vol. 171, No. 7 (July 1989), pp. 4080-4082  |
| DO | Kumagai et al, <i>Cytoplasmic inhibition of carotenoid biosynthesis with virus-derived RNA</i><br><i>Proceedings of the National Academy of Sciences, USA</i> Vol. 92: (1995) pp. 1679-1683   |
| DP | Lee et al, <i>Inhibition of Human Immunodeficiency Virus Type 1 in Human T Cells by a Potent Rev Response Element Decoy Consisting of the 13-Nucleotide Minimal Rev-Binding Domain</i><br><i>Journal of Virology</i> , Vol. 68, No. 12 (December 1994), pp. 8254-8264   |
| DQ | Leech, et al, <i>Expression of myb-related genes in the moss, Physcomitrella patens</i><br><i>The Plant Journal</i> , Vol. 3(1) (1993), pp. 51-61   |
| DR | Lindbo and Dougherty, <i>Pathogen-derived resistance to a potyvirus: immune and resistant phenotypes in transgenic tobacco expressing altered forms of a Potyvirus coat protein nucleotide sequence</i><br><i>Molecular Plant-Microbe Interactions</i> Vol. 5, No. 2 (1992) pp. 144-153.                        |
| DS | Lindbo and Dougherty, <i>Untranslatable transcripts of the tobacco etch virus coat protein gene sequence can interfere with tobacco etch virus replication in transgenic plants and protoplasts</i><br><i>Virology</i> Vol. 189: (1992) pp. 725-733.  |
| DT | Lindbo et al, <i>Induction of a highly specific antiviral state in transgenic plants: implications for regulation of gene expression and virus resistance</i><br><i>Plant Cell</i> Vol. 5, (1993) pp. 1749-1759   |
| DU | Lisiewicz et al, <i>Tat-Regulated Production of Multimerized TAR RNA Inhibits HIV-1 Gene Expression</i><br><i>The New Biologist</i> , Vol. 3, No. 1 (January 1991), pp. 82-89   |
| DV | Lisiewicz, et al, <i>Inhibition of human immunodeficiency virus type 1 replication by regulated expression of a polymeric Tat activation response RNA decoy as a strategy for gene therapy in AIDS</i><br><i>Proceedings of the National Academy of Sciences, USA</i> , Vol. 90 (September 1993), pp. 8000-8004 |
| DW | Lo et al, <i>Inhibition of Replication of HIV-1 by Retroviral Vectors Expressing tat-Antisense and Anti-tat Ribozyme RNA</i><br><i>Virology</i> , Vol. 190 (1992), pp. 176-183  |
| DX | Longstaff et al, <i>Extreme resistance to potato virus X infection in plants expressing a modified component of the putative viral replicase</i><br><i>European Molecular Biology Organization Journal</i> Vol. 12, No. 2 (1993) pp. 379-386.   |
| DY | Lovett, P.S., <i>Translational Attenuation as the Regulator of Inducible cat Genes</i><br><i>Journal of Bacteriology</i> , Vol. 172, No. 1 (January 1990), pp. 1-6  |
| DZ | Marathe and Marton, <i>Cis-repeat induced gene silencing in Tobacco</i><br><i>In Vitro Cellular and Developmental Biology</i> , Vol.33, no. 3, Part II, Abstract P-1041, March 1997.  |
| EA | Marathe and Rajendra, "Cis-repeat induced gene silencing in tobacco," Ph.D. Thesis, Department of Biological Sciences, University of South Carolina, Fall 1997.   |
| EB | Matzke and Matzke, <i>How and why do plants inactivate homologous (Trans)genes?</i><br><i>Plant Physiology</i> Vol. 107: (1995) pp. 679-685.  |
| EC | Matzke et al. (1998). <i>Epigenetic silencing of plant transgenes as a consequence of diverse cellular defence responses</i><br><i>Cell Mol. Life Sci.</i> Vol. 54(1998) pp. 94-103.  |

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

50223USCNT

APPLICATION NO.

10/085,418

APPLICANT

LOWE

FILING DATE:

February 28, 2002

Confirmation No.

4860

Group

1636

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

JAN 15 2004

|  |    |  |
|--|----|--|
|  |    | Memelink et al, <i>Structure and regulation of tobacco extensin</i><br><i>The Plant Journal</i> Vol. 4 (6), (1993) pp. 1011-1022   |
|  | EE | Metzlaff et al, <i>RNA-Mediated RNA degradation and chalcone synthase A silencing in Petunia</i><br><i>Cell</i> Vol. 88 (March 21, 1997) pp. 845-854.  |
|  | EF | Montgomery and Fire, <i>RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans</i><br><i>Proceedings of the National Academy of Sciences. USA</i> Vol. 95: (1998a) pp. 15502-07            |
|  | EG | Montgomery and Fire, <i>Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression</i><br><i>Trends in Genetics</i> Vol. 14, No. 7 (1998) pp. 255-258.  |
|  | EH | Mueller et al., <i>Homology-dependent resistance: transgenic virus resistance in plants related to homology-dependent gene silencing</i><br><i>Plant Journal</i> Vol. 7, No. 6 (1995) pp. 1001-1003.                               |
|  | EI | Nellen, W. and Lichtenstein C., <i>What makes an mRNA anti-sense-itive?</i><br><i>Trends in Biochemical Sciences</i> , Vol. 18 (November 1993), pp. 419-423  |
|  | EJ | Notice of Opposition of Australian Patent Application #74442/98 (747872), by Commonwealth Scientific and Industrial Research Organization (CSIRO), August 23, 2002   |
|  | EK | Notice of Opposition of Australian Patent Application No. 74442/98 (747872) by Benitec Australia Ltd., August 23, 2002   |
|  | EL | Pang et al, <i>Post-transcriptional transgene silencing and consequent tospovirus resistance in transgenic lettuce are affected by transgene dosage and plant development.</i><br><i>Plant Journal</i> Vol. 9: (1996) pp. 899-909. |
|  | EM | Powell et al, <i>Protection against tobacco mosaic virus infection in transgenic plants requires accumulation of coat protein rather than coat protein RNA sequences</i><br><i>Virology</i> Vol. 175: (1990) pp. 124-130.          |
|  | EN | Powell-Abel et al, <i>Delay of disease development in transgenic plants that express the tobacco mosaic virus coat protein gene</i><br><i>Science</i> Vol. 232: (1986) pp. 738-743.  |
|  | EO | Proud, C., <i>PKR: a new name and new roles</i><br><i>Trends in Biochemical Sciences</i> , Vol. 20 (June 1995), pp. 241-246  |
|  | EP | Que et al, <i>Distinct patterns of pigment suppression are produced by allelic sense and antisense chalcone synthase transgenes in petunia flowers</i><br><i>The Plant Journal</i> Vol. 13, No. 3 (1998) pp. 401-409               |
|  | EQ | Ratcliff et al, <i>A Similarity Between Viral Defense and Gene Silencing in Plants</i><br><i>Science</i> , Vol. 276 (June 6, 1997), pp. 1558-1560  |
|  | ER | Schiebel et al, <i>RNA-directed RNA polymerase from tomato leaves</i><br><i>Journal of Biological Chemistry</i> , Vol. 263: (1993a) pp. 11851-11857  |
|  | ES | Schiebel et al, <i>RNA-directed RNA polymerase from tomato leaves</i><br><i>Journal of Biological Chemistry</i> , Vol. 263: (1993b) pp. 11858-11867  |
|  | ET | Sijen et al, <i>RNA-Mediated Virus Resistance: Role of Repeated Transgenes and Delineation of Targeted Regions</i><br><i>The Plant Cell</i> , Vol. 8 (December 1996), pp. 2277-2294  |

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

FORM PTO-1449  
(REV. 7-85)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
50223USCNT  
APPLICATION NO.  
10/085,418  
APPLICANT  
LOWE  
FILING DATE:  
February 28, 2002Confirmation No.  
4860  
Group  
1636

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

|    |   |
|----|---|
|    | Smith et al. (1994). <i>Transgenic plant virus resistance mediated by untranslatable sense RNAs: Expression, regulation, and fate of nonessential RNAs</i><br><i>Plant Cell</i> , Vol. 6: (1994) pp. 1441-1453.   |
| EV | Stam et al, <i>Post-transcriptional silencing of chalcone synthase in Petunia by inverted transgene repeats</i><br><i>The Plant Journal</i> , Vol. 12(1), (1997), pp. 63-82   |
| EW | Stam et al, <i>The silence of Genes in Transgenic Plants</i><br><i>Annals of Botany</i> Vol. 79: (1997) pp. 3-12  |
| EX | Statement of Ground and Particulars filed by Benitec Australia Ltd. Opposing Australian Patent Application No. 747872, Dated November 22, 2002  |
| EY | Statement of Grounds and Particulars by CSIRO opposing Australian Patent Application 747872, Dated November 25, 2002  |
| EZ | Sullenger et al, <i>Analysis of trans-Acting Response Decoy RNA-Mediated Inhibition of Human Immunodeficiency Virus Type 1 Transactivation</i><br><i>Journal of Virology</i> , Vol. 65, No. 12 (December 1991), pp. 6811-6816   |
| FA | Sullenger et al, <i>Overexpression of TAR Sequences Renders Cells Resistant to Human Immunodeficiency Virus Replication</i><br><i>Cell</i> , Vol. 63 (November 2, 1990), pp. 601-608  |
| FB | Sun et al, <i>Resistance to human immunodeficiency virus type 1 infection conferred by transduction of human peripheral blood lymphocytes with ribozyme, antisense, or polymeric trans-activation response element constructs</i><br><i>Proceedings of the National Academy of Sciences, USA</i> , Vol. 92 (August 1995), pp. 7272-7276 |
| FC | Sun, et al, <i>Ribozyme-mediated suppression of Moloney murine leukemia virus and human immunodeficiency virus type I replication in permissive cell lines</i><br><i>Proceedings of the National Academy of Sciences, USA</i> , Vol. 91 (October 1994), pp. 9715-9719   |
| FD | Sun, et al, <i>Target sequence-specific inhibition of HIV-1 replication by ribozymes directed to tat RNA</i><br><i>Nucleic Acids Research</i> , Vol. 23, No. 15 (1995), pp. 2909-2913   |
| FE | Tabara et al, <i>RNAi in C. elegans: soaking in the genome sequence</i><br><i>Science</i> Vol. 282: (1998) pp. 430-431  |
| FF | Takahashi et al, <i>Development of necrosis and activation of disease resistance in transgenic tobacco plants with severely reduced catalase levels</i><br><i>The Plant Journal</i> , Vol. 11(5) (1997), pp. 993-1005   |
| FG | Ten et al, <i>A repetitive DNA fragment carrying a hot spot for de novo DNA methylation enhances expression variegation in tobacco and petunia</i><br><i>Plant Journal</i> , Vol. 8, No. 6 (1995) pp. 919-932   |
| FH | Thompson et al, <i>Improved accumulation and activity of ribozymes expressed from a tRNA-based RNA polymerase III promoter</i><br><i>Nucleic Acids Research</i> , Vol. 23, No. 12 (1995), pp. 2259-2268   |
| FI | Timmons and Fire, <i>Specific interference by ingested dsRNA</i><br><i>Nature</i> , Vol. 395: (1998) pp. 854.   |
| FJ | Vaucheret et al, <i>Inhibition of tobacco nitrite reductase activity by expression of antisense RNA</i><br><i>The Plant Journal</i> , Vol. 2(4) (1992), pp. 559-569   |
| FK | Wagner and Sun, <i>Double-stranded RNA poses puzzle</i><br><i>Nature</i> , Vol. 391; (1998) pp. 744-745   |

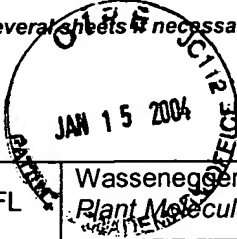
EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

[illegible]

**EXAMINER**

DATE CONSIDERED

\*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609: Draw a line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.